

**IN THE CLAIMS:**

- 1 1. (Currently Amended) A method for proxying data access commands from a first stor-  
2 age system to a second storage system in a storage system cluster, ~~the method comprising~~  
3 ~~the steps of:~~  
4 in response to a failure in communication between a client and the second storage  
5 system, receiving, at a proxy port on the first storage system, a data access command at  
6 the first storage system that is directed to the second storage system;  
7 forwarding the received data access command to the second storage system via a  
8 cluster interconnect;  
9 processing the data access command at the second storage system;  
10 returning a response from the second storage system to the first storage system via  
11 the cluster interconnect; and  
12 sending a response to the data access command to ~~a the~~ client from the first stor-  
13 age system.
- 1 2. (Currently Amended) The method of claim 1 wherein the storage systems are storage  
2 appliances ~~and wherein the data access command is received at a proxy port associated~~  
3 ~~with the first storage appliance.~~
- 1 3. (Original) The method of claim 2 wherein the proxy port comprises a physical port.
- 1 4. (Original) The method of claim 2 wherein the proxy port comprises a virtual port as-  
2 sociated with a physical port.
- 1 5. (Original) The method of claim 1 wherein the response comprises requested read  
2 data.

1 6. (Original) The method of claim 1 wherein the response comprises an acknowledge-  
2 ment of a write operation.

1 7. (Original) The method of claim 1 wherein the response comprises a predetermined set  
2 of read data.

1 8. (Original) The method of claim 1 wherein the cluster interconnect comprises a direct  
2 link between the first storage system and the second storage system.

1 9. -16. (Cancelled)

1 17. (Currently Amended) A method for proxying data access commands in a first stor-  
2 age system to a second system in a storage system cluster, ~~the method comprising the~~  
3 ~~steps of:~~

4 in response to a failure in communication between a client and the second storage  
5 system, receiving, at a proxy port on the first storage system, a data access command at  
6 the first storage system that is directed to the second storage system;

7 analyzing a received data access command at the first storage system;;  
8 forwarding the received data access command to the second storage system; and  
9 processing the received data access command at the second storage system.

1 18. (Currently Amended) The method of claim 17 further comprising ~~the steps of;~~

2 returning a response from the second storage system to the first storage system;

3 and

4 sending a response to the data access command to the client from the first storage  
5 system.

1 19. (Currently Amended) The method of claim 17 wherein the step of forwarding fur-  
2 | ther comprises ~~the step of~~ forwarding the data access command to the second storage sys-  
3 tem via a cluster interconnect.

1 20. (Original) The method of claim 19 wherein the cluster interconnect comprises a fi-  
2 bre channel link.

1 21. (Original) The method of claim 19 wherein the cluster interconnect comprises a di-  
2 rect link between the first storage system and the second storage system.

1 22. (Cancelled)

1 | 23. (Currently Amended) The method of claim ~~22-17~~ wherein the proxy port comprises  
2 a physical port.

1 | 24. (Currently Amended) The method of claim ~~22-17~~ wherein the proxy port comprises  
2 a virtual port associated with the physical port.

1 25. (Original) The method of claim 18 wherein the response comprises requested read  
2 data.

1 26. (Original) The method of claim 18 wherein the response comprises an acknowl-  
2 edgement of the write operation.

1 | 27. (Currently Amended) A computer readable ~~medium~~media, including program in-  
2 structions executing on a computer, for proxying data access commands from a first stor-  
3 age system to a second storage system in a storage system cluster, the computer readable  
4 | ~~medium-media~~ including instructions for performing the steps of:

5 | in response to a failure in communication between a client and the second storage  
6 | system, receiving, at a proxy port on the first storage system, a data access command at  
7 | the first storage system that is directed to the second storage system;  
8 | forwarding the received data access command to the second storage system via a  
9 | cluster interconnect;  
10 | processing the data access command at the second storage system;  
11 | returning a response from the second storage system to the first storage system via  
12 | the cluster interconnect; and  
13 | sending a response to the data access command to ~~a~~ the client from the first stor-  
14 | age system.

1 | 28. (Currently Amended) A system for proxying data access commands from a first  
2 | storage system to a second storage system connected via a cluster interconnect, the sys-  
3 | tem comprising:

4 | in response to a failure in communication between a client and the second storage  
5 | system, means for receiving a data access command at the first storage system that is di-  
6 | rected to the second storage system;  
7 | means for forwarding the received data access command to the second storage  
8 | system via a cluster interconnect;  
9 | means for processing the data access command at the second storage system;  
10 | means for returning a response from the second storage system to the first storage  
11 | system via the cluster interconnect; and  
12 | means for sending a response to the data access command to ~~a~~ the client from the  
13 | first storage system.

1 | 29. (Currently Amended) The ~~method system~~ of claim 28 wherein storage systems are  
2 | storage appliances and the data access command is received at a proxy port associated  
3 | with the first storage appliance.

1 | 30. (Currently Amended) The ~~method-system~~ of claim 29 wherein the proxy port com-  
2 | prises a physical port.

1 | 31. (Currently Amended) The ~~method-system~~ of claim 29 wherein the proxy port com-  
2 | prises a virtual port associated with a physical port.

1 | 32. (Currently Amended) The ~~method-system~~ of claim 28 wherein the response com-  
2 | prises requested read data.

1 | 33. (Currently Amended) The ~~method-system~~ of claim 28 wherein the response com-  
2 | prises an acknowledgement of a write operation.

1 | 34. (Currently Amended) The ~~method-system~~ of claim 28 wherein the response com-  
2 | prises a predetermined set of read data.

1 | 34. (Currently Amended) The ~~method-system~~ of claim 28 wherein the response com-  
2 | prises a predetermined set of read data.

1 | 35. (Currently Amended) A method for proxying data access commands from a first  
2 | storage system to a second storage system in a storage system cluster, the method com-  
3 | prising:

4 |       ~~in response to a failure in communication between a client and the second storage~~  
5 | ~~system~~ receiving a data access command at the first storage system that is directed to the  
6 | second storage system;

7 |       forwarding a data access command from the first storage system to the second  
8 | storage system;

9 |       processing the data access command at the second storage system; and

10 |       returning a response from the second storage system to the first storage system.

- 1 36. (Previously Presented) The method of claim 35 further comprises sending a re-  
2 sponse to the data access command from the first storage system.
- 1 37. (Previously Presented) The method of claim 35 wherein the data access command is  
2 forwarded via a cluster interconnect.
- 1 38. (Previously Presented) The method of claim 35 further comprises receiving by the  
2 first storage system the data access command that is directed to the second storage sys-  
3 tem.
- 1 39. (Previously Presented) The method of claim 35 further comprises returning the re-  
2 sponse from the first storage system to a client.
- 1 40. (Previously Presented) The method of claim 39 wherein the response is returned via  
2 the cluster interconnect.

1 Please add claims 41 *et al.*

1 41. (New) A method for proxying data access commands from a first storage system to a  
2 second storage system in a storage system cluster, comprising:

3 receiving a data access command at the first storage system;

4 determining the data access command was received at a proxy port on the first  
5 storage system;

6 passing the data access command to a local virtual adapter;

7 forwarding the received data access command to the second storage system via a  
8 cluster interconnect;

9 processing the data access command at the second storage system;

10 returning a response from the second storage system to the first storage system via  
11 the cluster interconnect; and

12 sending a response to the data access command to a client from the first storage  
13 system.

1 42. (New) The method of claim 41, wherein the data access command is directed to the  
2 second storage system.

1 43. (New) The method of claim 41, wherein the proxy port comprises a physical port.

1 44. (New) The method of claim 41, wherein the proxy port comprises a virtual port.

1 45. (New) The method of claim 41, wherein the first storage system receives the data ac-  
2 cess command in response to a communication failure between the client and the second  
3 storage system.

1 46. (New) A system for proxying data access commands from a first storage system to a  
2 second storage system in a storage system cluster, comprising:

3           a proxy port on the first storage system, the proxy port to receive a data access  
4       command that is directed to the second storage system in response to a failure in commu-  
5       nication between a client and the second storage system;

6           a local virtual adapter on the first storage system, the local virtual adapter to for-  
7       ward the received data access command to the second storage system via a cluster inter-  
8       connect;

9           a processor on the second storage system, the processor configured to process the  
10      data access command at the second storage system;

11          a partner virtual adapter on the second storage system, the partner virtual adapter  
12      to return a response from the second storage system to the first storage system via the  
13      cluster interconnect; and

14          a network adapter to send a response to the data access command to a client from  
15      the first storage system.

1       47. (New) The system of claim 46, wherein the first storage system further comprises a  
2       local virtual target module to determine the data access command was received at a proxy  
3       port on the first storage system, and the local virtual target module to pass the data access  
4       command to the local virtual adapter.

1       48. (New) The system of claim 46, wherein the proxy port comprises a physical port.

1       49. (New) The system of claim 46, wherein the proxy port comprises a virtual port.